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Preliminary Amendm Applicants: Steven Noville Chatfield et al.

Atto Docket: KCO1003US

Serial Number: To Be Assigned

Page 5, line 19, after "E.coli." insert -, and Seq. Id. No. 4 shows the

corresponding amino acid sequence.--.

Page 6, line 20, delete "extracytoplamic" and insert

--extracytoplasmic-- in its place.

Page 7, line 7, delete "extracytoplamic" and insert

--extracytoplasmic-- in its place.

IN THE CLAIMS:

Please cancel claims 18 and 19 without prejudice.

Please amend the claims as follows:

Claim 3, line 1 (page 30, line 10) delete "or 2".

Claim 4 line 1 (page 30, line 13), delete ", 2 or 3".

6. (Amended) A vaccine according to [any one of the preceding claims] claim 1 wherein the protein encoded by the mutant gene is SurA.

7. (Amended) A vaccine according to [any one of the preceding claims] claim 1 wherein the bacterium is further attenuated by a non-reverting mutation in a second gene.

10. (Amended) A vaccine according to [any one of the preceding claims] claim 1 wherein the mutation in the gene encoding a protein which promotes folding of extracytoplasmic proteins [and/or the mutation in the second gene] is a defined mutation.

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11. (Amended) A vaccine according to [any one of the preceding claims] claim 1 wherein the bacterium has no uncharacterised mutations in the genome thereof.

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12. (Amended) A vaccine according to [any one of the preceding claims] <u>claim 1</u> wherein the bacterium is a bacterium that infects via the oral route.

13. (Amended) A vaccine according to [any one of the preceding claims] claim 1 wherein the bacterium is from the genera Salmonella, Escherichia, Vibrio, Haemophilus, Neisseria, Yersinia, Bordetella or Brucella.

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15. (Amended) A vaccine according to [any one of the preceding claims] claim 1 wherein the bacterium is genetically engineered to express an antigen from another organism.

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17. (Amended) A vaccine according to claim 15 [or 16] wherein expression of the antigen is driven by the *nirB* promoter or the *htrA* promoter.

Please and the following new claims:

--21. A vaccine according to claim 2 wherein the protein encoded by the mutant gene promotes the folding of secreted proteins.

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22. A vaccine according to claim 6 wherein the bacterium is further attenuated by a non-reverting mutation in a second gene.

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- A vaccine according to claim 22 wherein the second gene is an aro 23. gene, a pur gene, the htrA gene, the ompR gene, the galE gene, the cya gene, the crp gene or the phoP gene.
- 24. A vaccine according to claim 23 wherein the aro gene is aroA, aroC, aroD or aroE.
- A vaccine according to claim 7 wherein the mutation in the second 25. ene is a defined mutation.
 - 26. A vaccine according to claim 22 wherein the mutation in the second gene is a defined mutation.
- A vaccine according to claim 16 wherein expression of the antigen is 27. driven by the *nirB* promoter or the *htrA* promoter.
 - 28. A method of vaccinating an animal comprising administering a yaccine according to claim 1.
 - 29. A method according to claim 28 wherein the animal is a human.
 - A method of manufacturing a vaccine comprising providing a 30. bacterium attenuated by a non-reverting mutation in a gene encoding a protein which promotes folding of extracytoplasmic proteins and adding pharmaceutically acceptable carrier or diluent .--